



Out of Home Data Collection and the PPI

A guide to approaching out of home survey methods

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Acknowledgements

The Poverty Probability Index (PPI®) is a simple, accurate and affordable methodology that pro-poor organizations can use to estimate and track the poverty rates of those they serve. For more information, visit www.povertyindex.org. Additional resources from Mark Schreiner can be found at www.microfinance.com.

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Introduction

The Poverty Probability Index (PPI®) is a simple poverty assessment tool that measures poverty at a point in time. The PPI consists of a country-specific 10-question scorecard, or survey, and a correlating lookup table. The lookup table translates scorecard responses into the likelihood that a respondent lives below the poverty line. For more information on the PPI, please visit www.povertyindex.org.

The preferred way to administer the survey is for a trained **enumerator** to travel to a respondent's home and to ask the 10 questions in an interview format. This is the preferred method for two reasons. First, enumerators are trained to understand the meaning of each survey question and are able to clarify any unfamiliar or confusing terms for the respondent. Furthermore, each enumerator has an interview guide that can be referenced when particularly complex questions arise during an interview. For example, you might predict that a term such as, "female head of household" is a foreign or often misinterpreted term for some people. A trained enumerator, by referencing their survey guide, can clarify the question and help the respondent come up with the best answer.

The second reason that in-home surveying is preferred is that it allows an enumerator to validate some of the responses by observation. For example, one question on a scorecard might be, "What kind of building material is the roof of this dwelling made of?" An enumerator can inspect the roof to confirm that the response given was correct. Observation enhances the accuracy of the overall score.

While in-home interviews are the recommended survey method for the PPI, in-home interviews can be expensive and time-consuming. This is especially true for organizations working with rural populations where households can be difficult to reach. If this is the case for your organization, you may want to consider other survey methods such as SMS, mail, or community center surveying. These methods are called *out of home data collection methods*.

The purpose of this guide is to introduce you and your organization to an array of out of home data collection methods. The guide will serve as a springboard to launch your organization into the process of choosing and implementing the best survey method for your organization *and* your intended respondents.

This guide is not exhaustive; you are encouraged to 'think out of the box' about the strengths of your organization and how to capitalize on these strengths. Each situation is **unique**.

Tips on How to Use This Guide

- ▶ If you see a term in **green**, learn more about it on the side bar.
- ▶ Invite others from your organization to review this guide. A second or third viewpoint can be a valuable contribution to choosing a survey method.
- ▶ Take advantage of the case studies and associated lessons learned that are presented in this guide.

Enumerators are people who administer surveys and collect data or information.

*This is a good time to start thinking about what your organization does really well – what is **unique** about whom you serve, how you serve them, and your impact? How are you different from other organizations in your region or sector?*

Methods

As your organization considers different surveying methods, one of the most critical pieces of information to consider is: what do you know about your intended respondents?

- ▶ What do the respondent's day-to-day routines look like? Do people travel away from the home during the day? In what season? And to where?
- ▶ Where is the respondent population located? Are they mobile? Are there passable roads and reliable transportation?
- ▶ What do the respondents' literacy levels look like? Can the respondents read and write? Type responses?
- ▶ Do the respondents have an allegiance to your organization or any of your partners? Conversely, are there biases against your organization or your partners?

Keep these questions in mind as you review each of the following survey methods.

SMS

There are 6 billion mobile phone subscribers worldwide.¹ More people have access to mobile phones than toilets.² SMS is rapidly becoming a popular way for organizations to collect information from, and distribute information to, communities. While there are clear benefits to SMS data collection, such as reduced costs and eliminating **interviewer bias**, 1 billion people do not own a mobile phone. Vast disparities in mobile phone accessibility exist between the rich and the poor, the urban and the rural, the old and the young, etc. As such, your organization should consider whether conducting a survey via SMS will limit responses from the most poor, rural, or elderly, and how this would affect your data.

Challenges

- ▶ Biased against households without a mobile phone
- ▶ Can require compensation for airtime used responding to survey
- ▶ Requires high literacy levels, e.g. ability to comprehend key terms or concepts without explanation from an enumerator
- ▶ Requires knowledge of how to receive and send an SMS
- ▶ User input errors
- ▶ Difficult to control participation of others
- ▶ Expertise and funding required up-front to create platform

Benefits

- ▶ Data easy to tabulate
- ▶ Low-cost (survey infrastructure set-up can be costly)
- ▶ Less time-consuming (survey infrastructure set-up can be time-consuming)
- ▶ Easy to build in respondent compensation
- ▶ No interviewer bias
- ▶ Lower cost of study replication once infrastructure is set up

Interviewer bias occurs when an interviewer unintentionally introduces bias to an interview, skewing data integrity. Interviewer bias can result from assumptions that enumerators make about respondents or when enumerators phrase questions inconsistently. What can your organization do to limit interviewer bias?

¹ The World in 2012: ICT Facts and Figures, available at: <http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2011.pdf>

² Progress on Drinking Water and Sanitation 2012 Update, available at: <http://www.unicef.org/media/files/JMPReport2012.pdf>

Mail

Conducting surveys by mail can be impractical if the respondent group lives in a rural area, but this method should not be discounted immediately; mail can be a viable survey method if your respondent group is stationary and lives in, or regularly visits, an area that is serviced by a postal service. Mail surveys are most successful when respondents are accustomed to receiving and sending mail. Your organization will want to ensure that your respondent group has a high **literacy rate** and has experience filling in forms.

Challenges

- ▶ Difficult to reach areas with minimal infrastructure
- ▶ Typically low response rate
- ▶ Requires high literacy levels, e.g. ability to comprehend key terms or concepts without explanation from an enumerator
- ▶ User input errors
- ▶ Slower data collection period than other methods
- ▶ Difficult to control participation of others

Benefits

- ▶ Low-cost
- ▶ Less time-consuming for staff than in-person survey methods
- ▶ Gains access to people who are difficult to locate but have an address that they visit on a somewhat regular basis
- ▶ No interviewer bias

Bank Branch

If your organization has a bank branch (or other site affiliated with your organization) that is easily accessible and perceived positively in the community, this option may rise to the top of your list. By inviting respondents to travel to your location, you eliminate one of the more expensive and time-consuming portions of in home surveying: travel. Keep in mind, however, that this shifts the burden of travel onto your respondents. Following are some of the other challenges and benefits you should consider:

Challenges

- ▶ Perception of bank in community will dictate turnout
- ▶ Rural bank branches may face lower turnout because of the travel required
- ▶ Excludes participants who are not members of the bank
- ▶ More time-consuming and costly than SMS or mail
- ▶ Interviewer bias
- ▶ Time-consuming data tabulation

Benefits

- ▶ High turnout if location is already frequented by respondents or is centrally located
- ▶ High turnout if reputation of bank is positive in community
- ▶ Opportunity to enhance visibility of bank in community, if desired
- ▶ Less time-consuming and costly than in home surveys
- ▶ Enumerators can clarify confusing questions, resulting in higher data integrity

*Double-check your understanding of **literacy rates** among your respondents. It is not uncommon for people to indicate that they know how to read and write and for organizations to understand this to mean 'literate'. In reality, a person may not be able to read and write to the level required to complete a survey.*

School, Clinic, Community Center

Does your organization have a relationship with a school, clinic, or community center that is easily accessed by the respondent group? If so, you may want to consider administering the survey at one of these locations. It will be important to ensure that the location does not exclude some of your survey group. For example, your organization may inadvertently exclude part of the group by choosing a community center that is not approachable by 'outsiders', e.g. a particular ethnic or age group. Your organization will need to know your survey population well to make this determination. Following are some other points for your consideration:

Challenges

- ▶ Low turnout, particularly in rural communities where travel is burdensome
- ▶ More time-consuming and costly than SMS or mail
- ▶ May exclude participants who are not members of the dominant culture, ethnicity, religion, etc.
- ▶ Interviewer bias

Benefits

- ▶ Enumerators can clarify confusing questions, resulting in higher data integrity than texting or mail
- ▶ High turnout if location is frequented by respondents or is centrally located

Other

Every organization is unique and will adopt a survey method for different reasons. The challenges and benefits are nuanced and should be considered carefully to ensure that they suit your organization and the respondent population.

Case Studies

Kenya: SMS

Overview

Juhudi Kilarimo is an organization that operates in Kenya, and offers financing to smallholder farmers and rural enterprises. In order to better understand its clients and the impact of its services, Juhudi Kilarimo adopted the PPI. Considering most of Juhudi Kilarimo's clients live in very remote locations, the organization explored alternatives to in-home surveying.

While considering a variety of survey methods, Juhudi Kilarimo assessed its strengths as an organization and what mode of communication would best suit its clients. One of the identified strengths was that Juhudi Kilarimo already communicated to its clients via SMS. By building upon its existing communication strategy, the organization reasoned that survey administration via SMS would be straight forward and result in a high response rate.

Before launching into a full survey of all of its clients, Juhudi Kilarimo undertook a 2-part pilot study of a portion of its clients. The motivation for this was two-fold. First, since SMS is not the preferred method of PPI survey administration, it was important for the organization to ensure that the data collected was accurate. Second, a pilot study would allow the organization to work out the kinks in its methodology, ensuring a more seamless full-scale study.

Part I of the pilot study, preparing and administering the survey via SMS, began by choosing a sample size. Juhudi Kilarimo selected 300 of its clients in two counties: Murang'a and Nkubu. Suspecting that an incentive may help increase response rate, and wanting to understand how incentives impact response rate, the organization divided its target audience into three groups: 1) those prepared for the survey and rewarded for participation, 2) those not prepared for the survey but rewarded for the participation, and 3) those prepared for the survey and not rewarded. For technical support, Juhudi Kilarimo partnered with mSwali, a web-based **platform** for SMS that boasts a broad reach across rural communities in Kenya. The **response rate** to Part I was 29% (n=87).

Part II of the pilot study tested the validity of the data provided by the 87 respondents. To do this, the organization created an in-home validation questionnaire to administer to the 87 respondents. The validation questionnaire included not only the original 10 questions but also supplementary questions designed to query the comprehension of the SMS survey³. Juhudi Kilarimo suspected that some survey questions administered via SMS might have been difficult to understand. Validation questions also queried the incentive process and whether promised incentives had been received. Also included in the validation questionnaire was a **validation form**. The response rate for Part II of the survey was 84% (n=73).

*Depending on your location, there may be a number of options of **platforms** to help your organization build the SMS survey. Building a strong platform will ensure that your data is easily tabulated.*

*By identifying a **response rate**, organizations can make an informed decision about the sample size required for a full-scale study.*

*Do you remember the example on page 1 about how an enumerator can validate data by observing his or her surroundings? A **validation form** is used to record this information.*

³ For specific examples of supplementary questions, see Appendix 1: Creating a Validation Questionnaire

Findings

Data Quality & Accuracy

*When you read through your country's scorecard, are there any terms that you find confusing at first glance? If so, you should assume that these questions will also be confusing to respondents. What can your organization do to avoid **misinterpreted** terms? The Interview Guide is designed to address confusing or ambiguous terms, and should be reviewed by enumerators before going into the field.*

The first goal of the pilot study was to understand the quality and accuracy of data collected via SMS. As such, after administering Part I and II of a pilot study, Juhudi Kilarimo took a close look at the data collected, looking for unexpected or unusual data points or trends.

The first unusual trend found in the data set was that a significant number of respondents answered question #5 differently in the validation questionnaire – over 50%. The validation questionnaire captured an explanation for the inconsistent responses. As it turned out, question #5 dispatched via SMS was “How many cooking pots does your household own?” In the validation questionnaire, the question was, “How many frying pans does your household own?” Both surveys were written in English and Swahili and both reflected this subtle difference.

The second unusual trend found in the responses to question #10, “What is the highest school grade that the female head/spouse has completed?” Over 35% of respondents answered this question differently in the in-home validation questionnaire. Enumerators learned through the completion of the validation questionnaire that this question was confusing to respondents. As such, the term ‘female head/spouse’ was **misinterpreted** by a large portion of the respondents. Juhudi Kilarimo reasoned that, while in-home interviews allowed respondents to ask clarifying questions, the SMS survey did not accommodate clarification of ambiguous terms like ‘female head/spouse’.

In terms of accuracy, by examining poverty levels using different poverty indexes, it was found that:

- ▶ Depending on the poverty line used for analysis, the measured difference in poverty rates between the two methodologies was quite low, ranging from a .1% difference (National Poverty line) to a 4.4% difference (\$2.50/day 2005 PPP line).
- ▶ For the National, \$1.50/day 2005 PPP and \$2.50/day 2005 PPP poverty lines, the differences in rates were not found to be statistically significant.
- ▶ For the USAID 'Extreme' poverty line, there was a statistically significant difference in rates, with the likelihood of poverty being higher in the SMS study.

Overall, the issues identified in questions #5 & #10 led to a high discrepancy rate between the SMS and in-home data collection. 29% of the questions administered differed in answer between the two methodologies. However, this did not lead to drastic differences in the calculated poverty rates.

Improvements for Full Survey

The second goal of the pilot study was to discover any logistical problems and to understand how to make improvements for the full study. One challenge highlighted in this study is that survey questions can be interpreted differently by different people. Unfortunately in this instance, PPI questions cannot be changed in anticipation of comprehension challenges. Language is simply a nuance for your organization to be aware of as you prepare to administer the PPI.

Incentives are nuanced, as Juhudi Kilarimo learned. If administered poorly, incentives can attract criticism and negatively impact the view of your organization. Be sure to approach incentives with care.

Other noteworthy findings:

- ▶ The SMS survey was much simpler to administer in terms of time and cost than in-home surveys.
- ▶ **Incentivizing** people to respond to surveys was a mixed experience. Some respondents felt coerced while others felt adequately compensated for their time. Juhudi Kilarimo found through validation questionnaires that some respondents did not receive their incentives but the cause of this was not identified.
- ▶ The SMS interface needed improving to ensure that user input was restricted to picking one response from a list of choices, rather than allowing a respondent to type an answer. This would eliminate the problem of having to tabulate data in a variety of formats, e.g. “one” vs. “1”, and the likelihood of erroneous errors.

Lessons Learned

- ▶ Remember that SMS surveys eliminate the possibility for respondents to ask clarifying questions if they do not understand a specific question. Take this into consideration when reviewing data.
- ▶ If your organization interprets the PPI survey into a region-specific language, it is critical that the translation is accurate.
- ▶ Draw upon local partnerships to increase participant response rates. When respondents were asked about their motivation to respond to the survey, the most frequently cited response was that they had a relationship with Juhudi Kilarimo. Do you partner with any organizations that have a positive rapport with the population your organizations intends to survey?

Peru: Coffee Collection Center

Overview

In Peru the National Institute of Statistics (INEI) uses the National Household Survey to obtain information about living conditions, including income and expenditures by household. This information can be distilled to communicate poverty levels in different regions of the country. Every month during the survey period, the INEI administers approximately 2,200 surveys containing 344 questions. Administering this survey is labor- and resource-intensive, not to mention burdensome to respondents.

Administering a survey of 344 questions requires extensive time and resources. Moreover, respondents are burdened by the time it takes to complete the survey. As such, The Consultative Group to Assist the Poorest (CGAP), in partnership with the Grameen Foundation, set out to adopt the PPI and to test the viability of using community center surveying as an alternative to in-home surveying. The Consortium of Private Organizations Promoting the Development of Micro and Small Enterprises (COPEME) was selected to administer a pilot study of the PPI.

COPEME selected four coffee growing cooperatives located in Jaén, the capital of Jaén Province. The four cooperatives work with 3,500 different producers, giving COPEME a large potential respondent group. COPEME aimed to have a sample size of no less than 300.

COPEME observed that each cooperative had a common meeting place; the coffee collection center. Moreover, the center was visited by members from each cooperative regularly but not on a predictable day. As such, COPEME reasoned that, if the survey was administered over a series of days until 300 responses were collected, that they would have a **randomized sample** of respondents.

A pair of enumerators was selected from each cooperative; one enumerator was responsible for completing coffee collection center interviews while the other was responsible for completing in-home interviews. The enumerators were selected for their knowledge of the area, mobility (motorcycle), and their experience in this kind of work. All 8 enumerators were trained together on one day.

Survey administration at the coffee collection centers took place over 5 days (July 5-8) and was supervised by COPEME staff. COPEME staff provided feedback and guidance to enumerators as necessary. 320 people were surveyed, but 9 of these responses were discarded due to errors in the data.

In-home survey administration took place over 6 days (July 6-11). This survey targeted the same households that were interviewed in the coffee collection center survey. All 311 households were successfully surveyed.

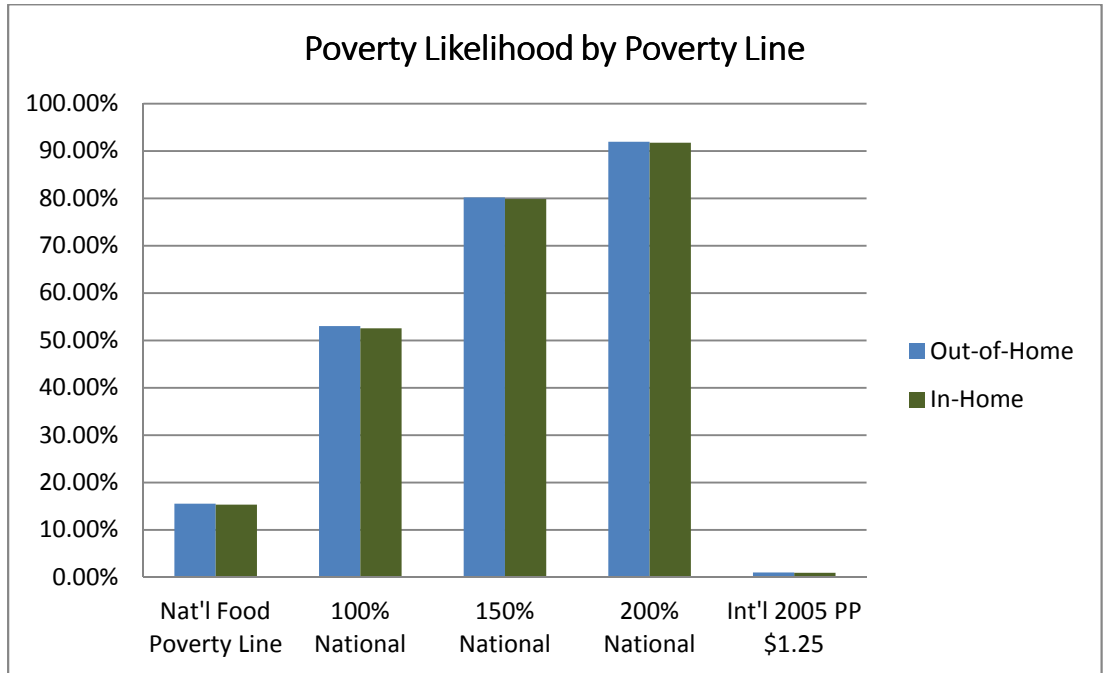
Randomized samples can enhance data integrity but can also produce more work for your organization. How can your organization creatively introduce simple randomization into your study?

Findings

Data Quality

Before reading on to the results, what kinds of challenges would you expect to see with surveying respondents at a coffee collection center?

The chart below shows the break-down of how PPI scores translated to different poverty levels. You will note that the poverty likelihoods are nearly identical. COPEME concluded that there was no statistically significant difference in poverty rates between the two methods, no matter the poverty line referenced.



It is interesting to note that while the likelihood of poverty of the two survey methods is very similar, this does not mean that respondents provided the same response to each question. For example, 9% (n=27) of respondents answered question #4 differently and 10% of respondents (n=32) answered question #6 differently. All 10 questions had some variation in response, but these two stood out above all others.

Question #4 was, “How many rooms are used only as bedrooms?” Enumerators and COPEME staff learned that the variation in responses can be attributed predominantly to the interpretation of ‘bedrooms’. Respondents noted that they had rooms in their homes that were divided by plastic or curtains. As such, the rooms could be viewed as one or two rooms, depending on their current set-up and function.

Question #6 was, “What fuel does the household most frequently use for cooking?” When respondents were asked why there was variation in their responses (if applicable), most noted that fuel use depends on the day or season. Harvest season, for example, is a season when people use more wood for fuel. It is also worth noting that some respondents mistook wood for coal, leading to a different response.

Overall this case study found that surveying producers at the coffee collection center was a good alternative to in-home surveying.

Improvements for Full Survey

In survey administration, it is very difficult to anticipate which **questions** will present challenges to respondents. This is particularly true when enumerators or their trainers are already familiar with the questions and their meaning. As such, it is important for trainers and enumerators to take a step back from their understanding of the questions and to think critically about how it might be interpreted differently. It is only by thinking critically about how key words like “bedroom” can be interpreted that enumerators can ensure accurate responses.

This study could be improved through the use of a validation questionnaire, as highlighted in the Kenya case study. While enumerators collected information in an ad hoc way about response variations, there was no formal system in place to make sure that this happened in a thorough manner. If COPEME had designed a validation survey for use with respondents, the organization could have learned a lot more about the experience of respondents including what it was like to be interviewed at the coffee collection center and how they felt about being interviewed by peers from their cooperative.

Lessons Learned

While questions #4 and #6 were somewhat problematic, they were not problematic *enough* to influence, in aggregate, a household’s likelihood of poverty. This is a factor of two pilot components: the sample size of the study was adequately large and the PPI Index is designed to allow for some variance within a data set without dramatically affecting PPI scores.

Overall, this case study did not present as many challenges as the Kenya case study. As noted above, this could be expected to a certain degree considering that the out of home survey was administered in-person by a trained enumerator. Additionally, the survey team took steps to ensure high integrity data collection. If your organization is considering using community center surveying, you may be able to mimic some of these steps:

- ▶ Have a very experienced staff person present at the community center to answer particularly complex questions that arise during interviews.
- ▶ Choose a location that your respondents visit on a regular basis.
- ▶ Develop selection criteria for your enumerators including familiarity with the area, mobility, and experience surveying.

We plan to conduct further testing on out of home PPI data collection in the coming year. These tests will build upon the two case studies presented here, and aim to comprehensively test various methodologies with larger sample sizes. Visit www.povertyindex.org for updates on these efforts.

TIP: Note any other points that are specific to your organization that you want to remember as you move forward.

Summary of Case Studies

The two case studies presented in this manual lend tremendous insight into what your organization may face when approaching alternatives to in-home surveying. These case studies should guide your strategy from choosing the appropriate method to planning and administering the PPI survey. Below are some takeaways from the case studies for you to revisit as you work through this process.

What Does this Mean for Your Organization?

- ▶ SMS response rates will usually be lower than in-person survey methods. Do you have a large enough sample size so that a low response rate will not affect your data integrity?
- ▶ These case studies demonstrate that in-person interviewing results in more accurate data than SMS surveying. There is not enough data in these case studies, however, to conclude that your organization cannot collect accurate data via SMS. Do not be discouraged; as you have already learned, you can be very creative in how you find respondents, administer surveys, collect responses, administer incentives, etc. Remember to think about whom you will survey and what will yield the best data.
- ▶ Do not forget to consider how you want to use the data you collect. Is it a one-time snapshot? Or will it be tracked over time? When you review the Kenya and Peru case studies, which one would have been better for a starting point for a long-term poverty tracking project? There is no correct answer to this question; the point of this question is to think about the challenges and benefits through a different lens. The SMS case study did not feel nearly as successful in terms of collecting a lot of responses of high integrity. That said, if it were duplicated with corrections, could it be more successful?

▶ _____

▶ _____

▶ _____

Guide for Organizations

Now that you have learned about some of the alternatives to in-home surveying, you may have some ideas about how you want to proceed. Perhaps you have been reminded of a strategic partner in your region that has expertise in developing SMS surveys. Alternatively, you may have taken stock of your organization's assets, both monetary and otherwise, and realized that in-home surveying is the most suitable approach. No matter where you are in the decision process, refer to Appendix II: *Checklist – Understanding the Population and Your Organizational Capacities*. Review the questions provided and think critically about each question. Keep these questions in the back of your mind:

- ▶ What assumptions are behind your responses?
- ▶ What evidence do you have for your responses?
- ▶ Does one or more question warrant further investigation?

If you are content with your responses to the Checklist and feel confident in your chosen survey method, you are ready for your next steps.

Next Steps

The following sections are designed to guide your organization as it tests and adopts an out of home survey method.

Below is a chart of the four phases of work that you have ahead of you. You can think of these four phases as planning, testing, evaluating, and implementing.

PHASE 1: Planning	PHASE 2: Testing	PHASE 3: Evaluating	PHASE 4: Implementing
▶ Management Education	▶ Staff Training*	▶ Management Decisions	▶ Implement
▶ Pilot Design*	▶ Data Collection	▶ Response to Data*	▶ Analysis
▶ Preliminary Data Collection	▶ Pilot Analysis*	▶ Implementation Plan	▶ Organizational Response to Data

Each of these steps is applicable to any survey method, whether you plan to pursue an in home or out of home survey method. If you adopt an alternative to in-home surveying, however, there are significant nuances in some of the steps (identified with an asterisk*). Following are descriptions of these steps, detailing how you can ensure a strong study.

Pilot Design

A **pilot study** can be viewed as an opportunity to 'test run' PPI survey administration, and can be crucial to the success of a full study. When implementing new processes, it is always a good idea to test how well they work before implementing them at full scale.

TIP: Have you reviewed the Ensuring Data Integrity checklist available at www.povertyindex.org? If so and you have followed the steps listed, you have already taken the first steps to ensuring data integrity.

TIP: Learn more about Phases 1-3 in Piloting the PPI: A handbook for first-time users of the PPI, available at www.povertyindex.org.

The strongest pilots should be administered with the aim of understanding the strengths and weaknesses of your methodology. This information will inform the full study, making it run more smoothly. As such, your pilot methodology should mimic the intended full study methodology as closely as possible.

The following are components of pilot design that are particularly important if you plan to adopt an out of home survey method:

- ▶ Locate partners with relevant resources or skills. Do you partner with any organizations that are highly respected by community members? How do they communicate with their clients? Can you piggy-back on this communication strategy? Partnerships, while immensely beneficial, can introduce challenges when two organizations have different organizational styles. By conducting a pilot, you can discover and work through these differences.
- ▶ The response rate for in-home surveying for the PPI is well-documented and you can be confident in the response rates with this method. Response rates with other methods are much more nuanced. Consider how you might encourage a higher response rate. What steps can you take to enhance response rates? A pilot study can be used to test some of these steps, such as offering incentives.
- ▶ Identifying and selecting respondents will look different with different methods. For example, if you intend to survey via SMS you are limited to those with a mobile phone. If you intend to survey at a community center, you will likely interview fewer clients that reside far away. How will these trends affect your data? And is that OK? If you are concerned about who will actually respond to your survey, a pilot is a good opportunity to allay or confirm your concerns.
- ▶ As you build out your plan, take note of concerns you have about your approach. When designing the validation questionnaire, can you test these concerns? For example, if you expect respondents to travel to a central location, you might be concerned that a particular group of people, e.g. an ethnic minority, were excluded. What questions can you ask in the validation questionnaire that targets these concerns? A validation questionnaire is a tool that can greatly enhance the value of a pilot.

Finally, by reviewing case studies from your region or sector, you can learn a lot from other organization's mistakes. Seek out what others have attempted and what they learned.

A pilot study, while potentially time-consuming and resource-intensive, will pay off in the long run. In the Kenya case study, for example, the pilot study shed light on a poor translation (frying pans vs. cooking pots). If this information had not been learned via a pilot study, how would have this impacted a full-scale study?

KENYA: BUILDING A PILOT

One of the strengths of the Kenya case study was the planning that took place before any surveys were administered. Juhudi Kilarimo carefully examined its strengths as an organization, and considered what it hoped to learn from a pilot study. After thoughtful consideration, the organization took the following strategic steps:

- Juhudi Kilarimo identified that one of its strengths was that it already had a communication strategy established with clients: SMS. By partnering with mSwali, Juhudi Kilarimo was then able to capitalize on the skills and expertise that already existed in-house, saving time and money.
- By dividing the survey respondents into groups, Juhudi Kilarimo was able to test whether incentives and being notified of the survey beforehand enhances response rates. Respondents were divided into 3 groups: those that anticipated the survey and did not receive incentives, those that anticipated the survey and received incentives, and those that did not anticipate the survey but received incentives.
- In order to enhance its understanding of the study, Juhudi Kilarimo designed a validation questionnaire that anticipated certain challenges with the SMS survey, e.g. comprehension, and whether those selected to receive incentives had received the incentive. By administering a validation questionnaire to each respondent, the organization learned a lot about comprehension and how the incentive system worked.

What are some unique strategies that your organization can adopt?

Staff Training

Staff training is an opportunity to add critical skills to your team, enhancing the efficiency of survey administration and bringing about higher **data integrity**. Below are some training topics that are unique to each survey method.

SMS

- ▶ Adopting a mobile platform to administer surveys can introduce some technical requirements to your team. This is true even if most of the technical work is outsourced. Your team will need to have, at the very least, a general familiarity with how mobile platforms work and, as such, some of the nuances that can result in the data, e.g. keystroke and formatting errors.
- ▶ You or your team may be responsible for transitioning the data from its native environment to a program like Microsoft Excel. Training on this topic may be required.

Mail

- ▶ Data entry errors are one of the most common ways to corrupt data integrity. The process of reading hand-written responses and entering them into an Microsoft Excel spreadsheet is particularly problematic because data entry errors can occur in two different places: reading the response and entering the data. Staff should be trained in strategies to avoid data entry errors, e.g. working in teams.
- ▶ Response rate by mail is particularly low. A lot of this has to do with respondent not being compelled to respond. Some of it, however, can be controlled by your organization. For example, low response rates can be caused by incorrectly addressing a letter, human errors while stuffing envelopes, and incorrect addresses. Train your staff on techniques to reduce these kinds of errors.

Data integrity refers to the accuracy, consistency, and overall quality of data. Data with high integrity has a higher likelihood of reflecting actual trends in a population.

Bank Branch, School, Clinic, or Community Center

- ▶ Dedicate a significant amount of training time to understanding each term in the survey questions that might pose a challenge. Is the term confusing in itself? Or are there parts of your community that might understand the term differently?
- ▶ Depending on your location and sample size, you may attract a crowd of both respondents and other interested parties. Your team should be trained on how to manage a crowd, particularly those who are not survey participants. These individuals can be a distraction from the primary goals of the survey.

Developing a strong training curriculum is a challenge and can be a process of trial and error. We encourage you to incorporate question and answer sessions into your trainings to make sure that you cover any ‘blind spots’ that you did not anticipate.

Pilot Analysis

As noted earlier in this manual, in-home surveying of the PPI is well-documented. When your organization introduces an alternative method, you are entering uncharted territory. As such, it is important to observe, study, and thoughtfully consider your pilot study to ensure that, a) it was run as well as it could have been run and b) it resulted in the collection of *good* data. A pilot analysis is your key to understanding these two points.

A thorough pilot analysis will span the data collection process. If you wait until you have administered all of your surveys before thinking about a pilot analysis, you will have missed an opportunity to learn about the strengths and weaknesses of your survey method.

Remembering that each study is unique, consider adopting the following steps into your pilot analysis.

Component of Pilot Analysis

Suggested Methods

Component of Pilot Analysis	Suggested Methods
▶ Understand data quality	<ul style="list-style-type: none">▶ Refer to Poverty Index Checklist: Ensuring data integrity (available at www.povertyindex.org) and complete applicable steps.▶ Complete an in-home validation questionnaire with respondents and compare results.▶ Interview your staff (enumerators and/or those handling the data) to learn if they saw anything unexpected while completing interviews or reviewing data. Refer to Appendix II: Enumerator Interviews.
▶ Understand staff experience	<ul style="list-style-type: none">▶ Check-in with partner organizations (if applicable) in regular increments to make sure that project milestones are on track. Query how the work is progressing in an open-ended manner.▶ Be present at a random selection of interviews to observe the process. Interview enumerators (if applicable) to understand what challenges they faced.▶ Interview your staff to learn about their experiences. This might look similar to Appendix II: Enumerator

TIP: There are steps that you can take to enhance your data integrity. For more information, refer to ‘Piloting the PPI: A handbook for first-time users of the PPI’ and review the section entitled ‘Quality Control’. Available at www.povertyindex.org

	Interviews but should be tailored to the different roles on your team.
► Understand respondent experience	<ul style="list-style-type: none"> ➤ Be present at a random selection of interviews to observe the process. ➤ Interview staff about how they perceived the community response to the survey. Did respondents understand the purpose of the survey? Were they amenable to responding? Were any respondents resistant and, if so, why? ➤ Incorporate questions related to respondent experience in a validation questionnaire.

Response to Data

If you planned your pilot carefully, trained your staff well, and conducted a thorough pilot analysis, your organization will likely be prepared to embark on a full study after making some final adjustments. You may find, however, that due to unexpected circumstances, you need to make the difficult decision to re-administer the survey or even change your method. Some of these circumstances may be out of your control, e.g. weather. In this case, changing the date of the survey may be an easy fix. Alternatively, you may have had an unexpectedly low response rate which jeopardized your data integrity. If this is the case, you and your team will need to consider very closely why this happened, if you can remedy the response rate in a future trial, and whether a different method needs to be adopted.

Conclusion

Adopting an out of home survey method is a project that requires detailed planning, careful thought, and skilled execution. If successful your organization will adopt a method that results in high integrity data that does not overwhelm your capacities, financial or otherwise. This data will then be used to inform the direction of your work, benchmark your progress, and help your organization make a greater impact on the communities that you serve.

The key to making use of the PPI is to ensure that you collect *good data*. As such, we will be conducting more extensive testing on out of home survey methods in the near future. Stay tuned to www.povertyindex.org for updates.

Appendix I

POVERTY PROBABILITY INDEX CHECKLIST

Checklist – Creating a Validation Questionnaire

A validation questionnaire plays a critical role in helping to understand and validate the data collected in a pilot study. This document will guide you in the process of creating **your own** validation questionnaire.

The content of your survey will look different from the examples below; it should be dependent on your respondent population (location, demographics) and the strategy you undertook to complete the survey (locating respondents, method of survey, compensation).

Sample questions are broken into two categories: those aimed at accessing accuracy of the *data* collected in the pilot study and those that give you feedback on the *process* of the pilot study.

Questions to Validate Accuracy of Responses

The following is a series of questions and answer formats that can be used for the sample question, “How many mosquito nets does your household own”?

1. Could you please answer the question, “How many mosquito nets do your household own”?
2. Can you tell me why your response today is different from before? (if applicable)

Note: The wording here is important; you do not want your respondent to feel as if they are being accused of lying. To avoid this pitfall, make sure that the respondent understands why you are double-checking responses; you are making sure that you did your job correctly by administering the survey correctly.

You may find that responses fall into these kinds of categories:

- Had not counted correctly
- Changed since original survey
- Did not pay attention when answering
- Did not understand question
- Other: _____

3. Does the question make sense to you? If not, tell me more about what didn't make sense?

*Developing **your own** survey takes a lot of time and care – it's an art. A survey should go through multiple iterations before the final version is administered. With each iteration, focus on:*

- *developing concise and relevant questions*
 - *removing extraneous information*
 - *ensuring that you eliminate any biases in the questions that could influence responses*
-

TIP: part of your validation process can include observations. What can an enumerator observe in a respondent's home to help check for response accuracy?

Note: even if the respondent gave the same answer in the validation questionnaire, asking this question can provide an opportunity to gain additional insight into the respondent's experience.

4. _____

*Are there other questions that you want to ask of your respondents?
Brainstorm ideas in the space to the left.*

Questions to Improve Survey Administration

A validation questionnaire is an opportunity to 'test' how well you administered the survey from sourcing to compensating respondents. It is important to think critically about what is unique about your method – location, demographics, method, compensation – and where you may have room for improvement. For example, if your respondents expected compensation for minutes used in responding to a survey via SMS, was this compensation disbursed as promised? In this example, you may find some shortcomings to your methodology, allowing you to improve your processes for the full study.

1. Were you expecting to receive any compensation for your participation in the survey? If so, how did you learn about the plan for compensation? Did you receive the compensation when expected? Was the compensation the expected value (currency or mobile phone minutes, for example)?
2. If you expected compensation for your participation, was it adequate to compensate you for your time (or resources such as mobile phone minutes)?
3. How did you learn about the survey before it happened? Was it helpful that you were anticipating the survey (is applicable)?
4. Was the location of the survey convenient for you? Did you feel like you had enough time to answer each question? (if applicable)
5. _____

Checklist – Understanding the Population and Organizational Capacities

NOTES

The following are questions that your organization should consider carefully before choosing a survey method.

What do you know about the population you intend to survey?

1. Where does the population reside? Do they reside far away from your headquarters? Do they reside close to one of your branch offices? Are households located far from one another? Or are households located close together?
2. What kinds of transportation does the population use? Is it reliable? If this transportation requires roads, are the roads passable year-round? Does the population regularly travel to a common location?
3. Does your organization currently have direct contact with this population? Or indirect contact via a strategic partner? If so, what does this look like? Face-to-face, in-home, by happenstance, SMS, via a third party?
4. If you answered 'yes' to the question #3, are these interactions generally positive and productive? Or do they pose ongoing challenges? Why?
5. If you answered 'no' to question #3, how will you build a relationship with the population? Keep in mind that, without a relationship with a population, response rates will be particularly low, requiring a greater sample size.

What do you know about your organization?

1. What are your organization's strengths? Are you viewed positively in your community by a wide range of individuals or businesses? Do you have strong working partnership with other organizations in your sector or community? Do you have access to ample financial resources?
2. What are your organization's weaknesses? Are you new to a region or community? Do you lack strategic partnerships in the region? Do you have limited financial resources? Are you viewed positively by only a portion of the community?
3. What financial resources are you able to allocate to administering the PPI? How much staff time can you allocate to administering the PPI?
4. Who are your partners? How can these partnerships strengthen survey administration and data analysis?
5. Do you plan to use the PPI as a baseline for on-going sampling? Or are you hoping to capture a 'snapshot' or a population? What does this tell you about the resources you should dedicate to building a survey infrastructure?

